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A Review of the Spider Genus *Teminius* (Araneae, Miturgidae)

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ABSTRACT

The spider genus *Teminius* Keyserling, found from the southeastern United States and Greater Antilles south to Argentina, is removed from the synonymy of the African genus *Syrisca* Simon. Although these spiders have often been regarded as clubionids or gnaphosids, Simon's hypothesis that they are more closely related to the Australasian genus *Miturga* Thorell is probably correct. Despite the availability of numerous specific names, originally described in various genera and families, only three species occur in the collections examined; they are diagnosed and illustrated. Eleven specific names are newly synonymized: *T. vittatus* (Simon), *T. brasilianus* Keyserling, *T. keyserlingi* (Simon), *T. macrurus* (Mello-Leitão), *T. clarissus* (Franganillo), *T. agelenoides* (Franganillo), *T. agalenoides* (Badcock), *T. isolatus* (Bryant), and *T. rangelensis* (Franganillo), all with *T. insularis* (Lucas); *T. nebulosus* (Gertsch and Davis) with *T. affinis* Banks; and *T. pulcher* (Petrunkevitch) with *T. hirsutus* (Petrunkevitch).

INTRODUCTION

The species treated here are large (up to about 15 mm long) hunting spiders that form conspicuous parts of the ground-dwelling fauna of the Greater Antilles and the American mainland from the southeastern United States south to Argentina. They are easily recognizable by the combined presence of posterior lateral spinnerets that are agelenid-like (being long and composed of two subequal segments) even though the spiders have only two tarsal claws, a male palp with an extremely uniform structure involving a dis-

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tally expanded retrolateral tibial apophysis, a prolateral embolus, and an elongate, folded tegular apophysis (figs. 1, 5, 9), and a female epigynum consisting of a small median plate with an anterior extension (figs. 3, 7, 11) and heavily sclerotized internal ducts (figs. 4, 8, 12).

Despite being readily recognizable, these spiders have a complex nomenclatural history. At the family level, their close relationship to *Miturga* Thorell (now placed in the Miturgidae) was suggested long ago by Simon (1897a). In the subsequent American literature on these taxa, however, they were retained as members of either the Clubionidae or Gnaphosidae. The latter placement (favored, for example, by Bryant, 1940) is clearly erroneous (despite the relatively wide separation of the anterior lateral spinnerets), as no true gnaphosids have such agelenid-like posterior lateral spinnerets, the posterior median eyes are round rather than irregularly shaped, and the endites lack the oblique depression characteristic of gnaphosoids, having only a longitudinal depression paralleling the margins of the labium (see Platnick, 1977).

The limits of the Clubionidae (even in the narrowest contemporary sense, with all classical subfamilies other than the Clubioninae removed) are currently nebulous and unsupported by any putative synapomorphies (see Platnick and Ubick, 1989). Nevertheless, there is little doubt that the spiders considered here are more closely related to *Miturga* than to *Clubiona* Latreille. The subequally long segments of the posterior lateral spinnerets, for example, may prove to define a subgroup of miturgids; in any case, *Clubiona* and its close relatives share a presumably apomorphic reduction or loss of the distal segment with several families of two-clawed hunting spiders other than the Miturgidae. Of interest in this regard is the genus *Cheiracanthium* C. L. Koch, which has traditionally been regarded as a typical clubionine. No cladistic evidence for that placement has ever been presented, and the posterior lateral spinnerets of *Cheiracanthium* do have a moderately long second segment, indicating that this worldwide genus (including species with venom dangerous to humans, as is apparently the case in *Miturga*—see Main, 1976: 108) may prove to be a relatively plesiomorphic miturgid rather than a clubionine. Similarly, *Strotarchus* Simon, a genus often regarded as a clubionine (e.g., Edwards, 1958), has a long distal segment and was placed as a eutichurine miturgid by Lehtinen (1967).

Resolution of the limits and synapomorphies of the Miturgidae, however, will require detailed studies of the long-neglected Australasian fauna as well as the numerous genera of similarly large-bodied American and Old World taxa currently placed in the Clubionidae, Liocranidae, Tengellidae, and similar families. Lehtinen's (1967: 290) relimitation of the Miturgidae was based mainly on "large size and several kinds of modifications of spinnerets," although he did note that miturgids in general, including the species treated here, usually have notched trochanters and strong leg scopulae continuous with the claw tufts. Penniman, in an unpublished thesis (1985), also placed the species treated here outside the Clubionidae, Gnaphosidae, and allied families because of their lack of triangular precoxal sclerites extending from the sternum.

At the generic level, and again since the time of Simon (1897a), the spiders treated here have most often been placed in the genus *Syrisca* Simon. The type species of that genus, *S. pictilis* Simon from Senegal, is unfortunately based on juveniles, but examination of presumably related African specimens indicates that they do not share the genitalic conformation of American species and instead represent a separate miturgid genus (see, for example, Lessert, 1929: figs. 27, 28). The only exception we have found is the female holotype of *Syrisca vittata* Simon, purportedly from Ethiopia; that specimen belongs to the most common of the American species, and we suspect that its locality information is erroneous.

At least two generic names are available for the American taxa: *Teminius* Keyserling (1887) and *Eutychuroides* Petrunkevitch (1926). *Teminius* was first synonymized with *Syrisca* by Simon (1897a), but both names have been used subsequently for American taxa, resulting in considerable confusion. Roewer's (1955) catalog, for example, treated both generic names as valid (with *Teminius* listed as a gnaphosid and *Syrisca* as a mitur-

gine clubionid), and even cited the same species, *Teminius conjuncta* Banks from Costa Rica, under both generic names (that species was subsequently transferred to the gnaphosid genus *Apodrassodes* by Platnick and Shadab, 1983). *Eutychuroides* was first synonymized with *Teminius* by Bryant (1942); because she merely listed its type species as a synonym of *Teminius insularis* Keyserling, and failed to indicate explicitly that this was a new synonymy, subsequent catalogers overlooked this change. Roewer (1955) listed *Eutychuroides* as a valid clubionid genus even though its type (and only) species was also listed and indexed by him, in the Gnaphosidae, as a synonym of *T. insularis*. Unfortunately, Roewer's error in listing *Eutychuroides* as valid was perpetuated by both Brignoli (1983) and Platnick (1989).

Given this complex history at higher levels, it isn't surprising that species have been described more than once, even from relatively small areas. We have been surprised, however, by our comparisons of material from throughout the range of the genus, which indicate that only three species are diagnosable. Those species are largely allopatric; one is widespread in Florida, the Greater Antilles, and most of tropical South America; a second is apparently restricted to Oklahoma, eastern Texas, Louisiana, and northeastern Mexico (but may extend west to Arizona and Sonora); and the third is found from central Mexico south to Panama and across northern South America to Curaçao, with an isolated record in Hispaniola.

Some of the numerous synonyms are due simply to lack of comparisons of material from various regions (and particularly to neglect of the internal female genitalia, which are more informative than the external epigynum, and which are illustrated here for the first time), but others seem to reflect the extraordinarily wide variation in body size encountered in virtually all samples studied. It is not uncommon to find adult specimens (of the same sex) that were collected together with others that are only half their total length. We suspect that this enormous size variation (and consequent, minor allometric differences in somatic features like eye interdistances) may simply indicate that the number of preadult instars is not constant.

In addition to specimens in the American Museum of Natural History (AMNH), including material supplied by Willis Gertsch and Vince Roth, specimens and types were kindly made available by: Paul Hillyard of the British Museum (Natural History), London (BMNH); Darrell Ubick of the California Academy of Sciences, San Francisco (CAS), including material from his personal collection (CDU); Joe Beatty (JAB); Herbert Levi of the Museum of Comparative Zoology, Harvard University (MCZ); Christine Rollard of the Muséum National d'Histoire Naturelle, Paris (MNHN); Joan Jass of the Milwaukee Public Museum (MPM); Rudy Jocqué of the Musée Royal de l'Afrique Centrale, Tervuren (MRAC); and Charles Remington and Dave Furth of the Peabody Museum of Natural History, Yale University (PMY). Helpful comments on a draft of the manuscript were provided by: Charles Dondale of the Biosystematics Research Centre, Ottawa; Ray Forster and Willis Gertsch (AMNH); Charles Griswold of the National Museum of Natural History, Smithsonian Institution; Andrew Penniman of Defiance College, Defiance, Ohio; and Darrell Ubick (CAS).

SYSTEMATICS

Teminius Keyserling

Teminius Keyserling, 1887: 421 (type species, apparently first designated by Petrunkevitch, 1928: 154, *Teminius insularis* Keyserling [=*T. insularis* (Lucas)]).

Eutychuroides Petrunkevitch, 1926: 28 (type species by original designation *Eutychuroides fuscus* Petrunkevitch [=*T. insularis* (Lucas)]). First synonymized by Bryant, 1942: 348, through synonymy of type species.

Eutichuroides: Bonnet, 1956: 1844 (invalid emendation).

DIAGNOSIS: The structure of both the male palp (figs. 1, 5, 9) and female epigynum (figs. 3, 7, 11), as detailed above, is diagnostic. The examined females of African species attributed to *Syrisca*, including at least *S. russula* Simon from Ethiopia (in MNHN) and *S. longicaudata* Lessert from Zaire (in AMNH) as well as unidentified females from Nigeria, Chad, and Cameroon (in MRAC), differ from those of *Teminius* in having much stronger lateral epigynal margins as well as a transverse anterior epigynal margin that is lacking

in American females. The only described African male (that of *S. longicaudata*, in AMNH) and unidentified males from Nigeria and Zimbabwe (in MRAC) have a bifid tegular apophysis and an elongate, ventrally protruding median apophysis that are lacking in American males.

DESCRIPTION: Detailed and readily accessible descriptions of standard external characters can be found (under the above names or *Syrisca*) in Petrunkevitch (1925, 1926, 1930), Gertsch and Davis (1940), and Bryant (1940, 1948). The respiratory system is normal, consisting of anterior booklungs and four simple posterior tracheal tubes confined to the abdomen. The serrula consists of a single, strong row of teeth. The trichobothrial bases bear multiple transverse ridges, and the tarsal organ is capsulate.

DISTRIBUTION: Southeastern United States and Greater Antilles south to Argentina.

MISPLACED SPECIES: The second species placed in *Teminius* when the genus was originally described, *T. continentalis* Keyserling (1887), is a gnaphosid of the genus *Orodrassus* Chamberlin (see Platnick and Shadab, 1975). *Teminius nigriceps* Banks (1895) belongs to the gnaphosid genus *Haplodrassus* Chamberlin (see Platnick and Shadab, 1975), and *T. conjuncta* Banks (1914) to the gnaphosid genus *Apodrassodes* Vellard (see Platnick and Shadab, 1983). Examination of the female holotype of *Teminius monticola* Bryant (1948) from Hispaniola indicates that the species is misplaced; it probably belongs to a eutichurine miturgid genus, but a revision of that group will be necessary before the generic position of this species can be established. The palpal illustration of *Syrisca albopilosa* Mello-Leitão (1941: fig. 15) from Colombia indicates that the species does not belong to *Teminius*. Mello-Leitão (1933) transferred *Liocranum patagonicum* Boeris (1889) to *Syrisca*, but true *Teminius* species are not known from as far south as Patagonia, and are unlikely to occur there.

RELATIONSHIPS: A worldwide study of miturgids and their relationships will be necessary before the sister group of *Teminius* can be identified. The genus *Parasyrisca* Schenkel (1963) can be discounted as a possibility, as its Chinese type species and three other Chinese species misplaced by Schenkel in *Syrisca* are gnaphosids closely related to or congeneric with *Orodrassus* (see Ovtsharenko and Marusik, 1988). On the basis of palpal and epigynal morphology, however, the remaining taxa assigned to the subfamily Miturginae by Lehtinen (1967: 317–318), namely *Syrisca,* the Middle Eastern genus *Prochora* Simon, and the Australian genera *Miturga* and *Diaprograpta* Simon, may well constitute (with *Teminius*) a monophyletic group. Males, for example, share a prolateral embolus wrapping around the distal end of the tegulum, a large, medially situated tegular apophysis, and a retrolaterally incised cymbial margin. (The incision is barely detectable, and restricted to the base of the cymbium, in *Teminius*, but is pronounced in the other genera.) Elsewhere in the same publication, however, Lehtinen (1967: 266) also assigned the North American genus *Syspira* Simon to the Miturginae; the genitalia of that genus are similar to those of the other miturgine genera and the trochanters are notched, but the distal segment of the posterior lateral spinnerets is not as long and the inclusion of *Syspira* within the group therefore requires further study.

Teminius insularis (Lucas), new combination

Figures 1–4

Drassus insularis Lucas, 1857: 79, pl. 4, fig. 4 (female holotype from Havana, La Habana, Cuba, depository unknown; a female in MNHN bearing this name is from Jamaica and hence cannot be the type).

Syrisca vittata Simon, 1885: 376 (female holotype, purportedly from "Abyssinie: Agaos," probably mislabeled, in MNHN, examined). NEW SYNONYMY.

Teminius insularis Keyserling, 1887: 422, fig. 1 (female holotype from Grand An, Haiti, Hispaniola, in MCZ, examined). – Bryant, 1948: 409, figs. 92, 93.

Teminius brasilianus Keyserling, 1891: 40, figs. 17, 17a (male and female syntypes from Rio Grande, Rio Grande do Sul, Brazil, in BMNH, examined). NEW SYNONYMY.

Syrisca keyserlingi Simon, 1897a: 129 (replacement name for *Teminius insularis* Keyserling, regarded as preoccupied in *Syrisca* by *Drassus insularis* Lucas). NEW SYNONYMY.

Syrisca insularis (Lucas): Simon, 1897a: 131. – Gertsch, 1935: 11, fig. 34.

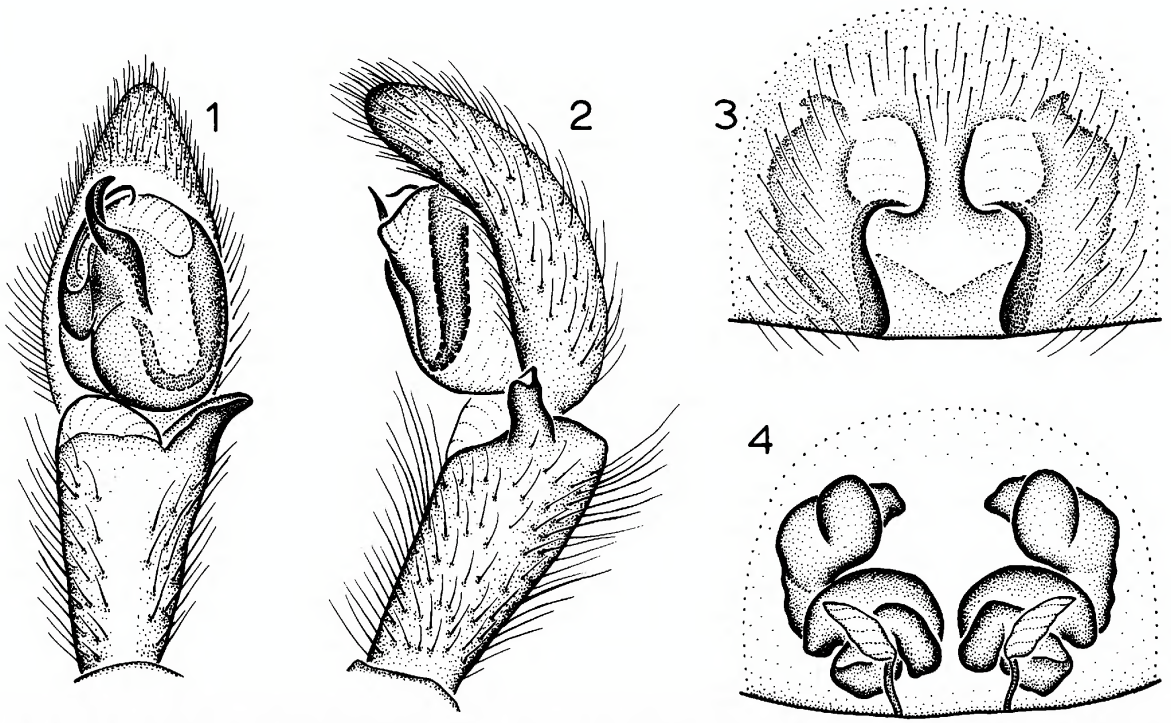
Syrisca moesta Simon, 1897b: 500 (two female syntypes from Pará, Pará, Brazil, in MNHN, examined). First synonymized with *Syrisca insularis* (Lucas) by Lehtinen, 1967: 266.
Syrisca brasiliana: Petrunkevitch, 1911: 513.
Syrisca macrura Mello-Leitão, 1922: 38 (female holotype from Pinheiro, Rio de Janeiro, Brazil, depository unknown, not examined). NEW SYNONYMY.
Eutychuroides fuscus Petrunkevitch, 1926: 57, fig. 17 (female syntype from St. Thomas, Virgin Islands, in PMY, examined). First synonymized with *Teminius insularis* Keyserling by Bryant, 1942: 348.
Syrisca hirsuta: Petrunkevitch, 1926: 63, figs. 20, 21 (Virgin Island male only); 1930: 92 (Puerto Rican male only).
Syrisca clarissa Franganillo, 1926: 60 (holotype from Santa Clara, Las Villas, Cuba, may be in Cuban Academy of Sciences, Havana, not examined). NEW SYNONYMY.
Syrisca agelenoides Franganillo, 1926: 61 (holotype from Santa Clara, Las Villas, Cuba, may be in Cuban Academy of Sciences, Havana, not examined). NEW SYNONYMY.
Syrisca pulchra: Petrunkevitch, 1930: 92, fig. 77 (Puerto Rican records only).
Syrisca agalenoides Badcock, 1932: 32, fig. 24 (two juvenile syntypes from Nanahua, Presidente Hayes, Paraguay, in BMNH, examined). NEW SYNONYMY.
Paratheuma isolata Bryant, 1940: 388, fig. 170 (male holotype from Isla de Pinos, La Habana, Cuba, in MCZ, examined). NEW SYNONYMY.
Teminius clarissa: Bryant, 1940: 397.
Syrisca rangelensis Franganillo, 1946: 101, figs. 6a–c (male and female syntypes from Sierra de Rangel, Pinar del Río, Cuba, may be in Cuban Academy of Sciences, Havana, not examined). NEW SYNONYMY.
Eutichuroides fuscus: Bonnet, 1956: 1844.
Syrisca isolata: Platnick, 1977: 200.

DIAGNOSIS: Males can be recognized by the shape of the retrolateral tibial apophysis, which appears bipartite in retrolateral view (figs. 1, 2), females by the medially recurved posterior epigynal ducts (fig. 4).

MALE: Described by Bryant (1940).

FEMALE: Described by Petrunkevitch (1926).

MATERIAL EXAMINED: **United States:** *Florida:* Dade Co.: Homestead, West Mowry Street, Mar. 20–25, 1968, avocado grove (A. M. Chickering, MCZ), 3♀; 3–4 mi NW Homestead, Mar. 15, 1960 (A. M. Chickering, MCZ), 1♂, 1♀. **Cuba:** no specific locality (N. Banks, MCZ), 1♀. *La Habana:* Finca Somorrostro, June 19, 1955 (M. L. Jaume, A. F. Archer, AMNH), 1♀; Havana, June 12 (Baker, MCZ), 5♀, Sept. 15, 1939, dry stony slope (H. Ris, AMNH), 1♀; Isla de Pinos, 1918 (Barbour, Brooks, MCZ), 1♂ (type); Lomas de Camoa, Jan. 5, 1947 (M. Barro, AMNH), 1♀; Mananao, Sept. 1939 (H. Ris, AMNH), 1♀; San Antonio de los Baños, Mar. 21, 1915 (Barbour, Brooks, MCZ), 1♀; University Hill, Havana, Nov. 5–9, 1915 (AMNH), 6♀. *Las Villas:* Vega Alta, Santa Clara (P. Bermudez, AMNH), 1♂. *Oriente:* Siboney, 1915 (V. Rodriguez F., MCZ), 1♀. *Pinar del Río:* San Vicente, July 7–8, 1956 (C. and P. Vaurie, AMNH), 1♂; Sierra de Anafe, Feb. 9–23, 1947 (M. Barro, AMNH), 12♀. **Jamaica:** no specific locality (MNHN), 1♀. *Manchester Par.:* Christiana, Nov. 15, 1957 (A. M. Chickering, MCZ), 1♀; Mandeville, Nov. 26–28, elev. 2131 ft (AMNH), 1♀. *St. Andrew Par.:* Bamboo Ave., Liguanea, Nov. 4, 1957 (A. M. Chickering, MCZ), 1♂; Fairway Ave., Nov. 18, 1963 (A. M. Chickering, MCZ), 1♂, 1♀; Hermitage Reservoir, Nov. 26, 1957 (A. M. Chickering, MCZ), 1♀, July 24, 1960 (P. and C. Vaurie, AMNH), 1♂; Hope Gardens, Oct. 23–Dec., 1957–1963 (A. M. Chickering, MCZ), 5♂, 7♀; Jacks Hill Road, Dec. 6, 1957 (A. M. Chickering, MCZ), 1♀; Kingston, Jan. 1912 (C. J. Brues, MCZ), 3♀; Liguanea Plain, Nov.–Dec. 1911 (C. J. Brues, MCZ), 1♀; Mona Heights, Nov. 29–Dec. 28, 1963 (A. M. Chickering, MCZ), 4♂, 4♀; Mona Road, Oct. 22–Dec. 7, 1957–1963 (A. M. Chickering, MCZ), 5♂, 1♀; Monroe Road, Liguanea, Oct. 15, 1957 (A. M. Chickering, MCZ), 1♂, 1♀; Old Hope Road, Kingston, Dec. 3, 1963 (A. M. Chickering, MCZ), 1♀; Palisadoes, Oct. 30, 1957 (A. M. Chickering, MCZ), 1♂; Richards Reservoir, Mona, Nov. 25, 1957 (A. M. Chickering, MCZ), 1♂, 1♀; University Campus, Mona, Oct. 5, 1957 (A. M. Chickering, MCZ), 4♀. *St. Catherine Par.:* Guanaboa Vale, Dec. 4, 1957 (A. M. Chickering, MCZ), 1♀; Old Harbour, Oct. 9, 1957 (A. M. Chickering, MCZ), 2♂, 2♀; 3 mi E Old Harbour, Oct. 21, 1957 (A. M. Chickering, MCZ), 1♂; School of Agriculture, Nov. 13–21, 1957 (A. M. Chickering, MCZ), 1♂, 1♀. *St. Elizabeth Par.:* Malvern, May 1905 (PMY), 3♀; no specific locality, Mar. 1952 (A. M. Chickering, MCZ),



Figs. 1–4. *Teminius insularis* (Lucas). **1.** Left male palp, ventral view. **2.** Left male palp, retrolateral view. **3.** Epigynum, ventral view. **4.** Epigynum, dorsal view.

2♀. *St. Mary Par.:* Castleton, Mar. 1905 (PMY), 3♀; Strawberry Fields, between Robin's Bay and Green Castle, Mar. 23, 1972 (H., L., and F. Levi, MCZ), 1♀. *St. Thomas Par.:* Golden Grove, Oct. 14, 1957 (A. M. Chickering, MCZ), 1♂; Roselle Falls, 28 mi E Kingston, Oct.4–Nov. 11, 1957 (A. M. Chickering, MCZ), 1♂, 2♀. *Trelawny Par.:* Cockpit, May 9, 1905, virgin forest (PMY), 1♂; Glastonbury, Nov. 14, 1957 (A. M. Chickering, MCZ), 1♂. **Hispaniola:** highlands between Commendadore, Haiti, and Post Terre Rouge, Dominican Republic, Aug. 22, 1935 (W. G. Hassler, AMNH), 1♀. *Haiti:* Ennery, Sept. 7–10, 1934 (P. J. Darlington, MCZ), 3♂, 1♀; Grand An (MCZ), 1♀ (type). **Puerto Rico:** Aguas Buenos, Sept. 19, 1925, under bark of log in field (A. Petrunkevitch, PMY), 1♂, 2♀, Nov. 27, 1925, under rock in field (A. Petrunkevitch, PMY), 2♀; Calle El Río, San German (D. Nazario, AMNH), 1♂; Chicken Island, off Culebra, Apr. 16, 1965 (H. Heatwole, F. McKenzie, AMNH), 1♀; College of Agriculture, Mayagüez, Nov. 23, 1925, under rock (A. Petrunkevitch, PMY), 1♀; Institute of Marine Biology, La Parguera, Jan. 22, 1964 (A. M. Chickering, MCZ), 2♂, 2♀; Jayuya, Dec. 31, 1925, under rock in field (A. Petrunkevitch, PMY), 1♂; Lajas, El Terreno, May 1962 (R. Bonilla, AMNH), 1♂, 1♀; Maricao (AMNH), 1♀; Mayagüez, woods near Nuclear Center, Jan. 27, 1964 (A. M. Chickering, MCZ), 1♂; Palomino Island, Nov. 7, 1964 (H. Heatwole, F. McKenzie, AMNH), 1♂, 1♀. **Virgin Islands:** *St. Croix:* no specific locality, Mar. 30, 1922 (E. E. Wilson, MCZ), 1♀, Apr. 10, 1925 (AMNH), 1♀, 1940 (H. H. Beatty, MCZ), 1♀, Sept. 1966 (A. M. Chickering, MCZ), 1♀; near King's Hill, Mar. 18, 1964 (A. M. Chickering, MCZ), 1♂. *St. Thomas:* Santa Maria Bay, July 29, 1925 (PMY), 1♂; no specific locality, July 1915 (C. R. Shoemaker, PMY), 1♀ (syntype), Feb. 22–Aug., 1964–1966 (A. M. Chickering, MCZ), 1♂, 2♀; Charlotte Amalie, Feb. 14, 1964 (A. M. Chickering, MCZ), 1♀. **Colombia:** *Meta:* Puerto Lieras, Lomalinda, elev. 300 m (B. T. Carroll, AMNH), 1♀. **Venezuela:** *Aragua:* Ha-

cienda la Trinidad, near Maracay, 1940 (C. Vogl, AMNH), 2♀; Rancho Grande, Apr. 27–May 30, 1942 (W. Beebe, AMNH), 1♂, 1♀. *Distrito Federal:* San José del Avila, Caracas, 1940 (C. Vogl, AMNH), 1♀. **Guyana:** *East Berbice:* Canje, Ikuruwa River, Aug.–Dec. 1961 (G. Bentley, AMNH), 1♂, 3♀; Parish, 1913 (AMNH), 1♀. *Rupununi:* Upper Essequibo River, Onoro region, Dec. 23, 1937 (W. G. Hassler, AMNH), 1♀; Rupunini River, between Dadanawa and Isherton, Nov. 5, 1937 (W. G. Hassler, AMNH), 1♀. **Surinam:** *Marowijne:* Anapaike village, Lawa River, Nov. 8–29, 1963 (B. Malkin, AMNH), 1♂. **Brazil:** *Amazonas:* Tefé, Nov.–Dec. 1919 (H. S. Parrish, MCZ), 3♀. *Minas Gerais:* Governador Valadares, Oct. 15, 1981, sifting litter (L. N. Sorkin, AMNH), 1♀, Mar. 9–23, 1983–1984, under rocks, wood (L. N. Sorkin, AMNH), 2♂, 4♀; Mina Serinha Diamantina, Dec. 1944 (E. Cohn, AMNH), 1♂, 1♀; Pocos de Caldas, Dec. 1943 (Pough, AMNH), 1♀. *Mato Grosso:* Mato Verde, Dec. 6–8, 1961 (B. Malkin, AMNH), 1♀. *Pará:* 50 km E Canindé, Feb. 22–25, 1966 (B. Malkin, AMNH), 1♀; Jacaré-Acanga, Oct. 1959 (M. Alvarenga, AMNH), 2♂, 1♀, Dec. 1968 (M. Alvarenga, AMNH), 1♀; Pará (MNHN), 2♀ (syntypes). *Rio Grande do Sul:* Rio Grande (von Ihering, BMNH), 1♂, 1♀ (syntypes). *São Paulo:* Jequirituba, São Paulo, Dec. 22–23, 1945, elev. 750 m (H. Sick, AMNH), 1♂. **Ecuador:** *Tungurahua:* 20 mi SE Ambato, Feb. 8, 1955, elev. 2000 m (E. I. Schlinger, E. S. Ross, CAS), 1♀. **Peru:** *Cajamarca:* S Jaén, May 16–18, 1967 (AMNH), 1♀. *Huánuco:* Acomayo, July 1946, elev. 2100 m (F. Woytkowski, AMNH), 3♂, 14♀; Ambo, elev. 2100 m (W. Weyrauch, AMNH), 4♀; Huánuco, Mar. 1940, elev. 1900 m (W. Weyrauch, AMNH), 1♀, 17 mi NE Huánuco, Dec. 28, 1954 (E. I. Schlinger, E. S. Ross, CAS), 2♀. *Loreto:* Iquitos, May 1920 (H. G. Parrish, MCZ), 1♀. *San Martín:* Misquiyacu, 20 km NE Moyobamba, Aug. 16–24, 1947 (F. Woytkowski, AMNH), 1♂. **Bolivia:** Crevaux, Río Pilcomayo, Aug. 5–15, 1964 (B. Malkin, AMNH), 1♂. **Paraguay:** *Central:* Asunción, Sept. 15, 1956 (C. J. D. Brown, MCZ), 1♂; San Lorenzo, Jan. 24, 1976, grass (H. G. Fowler, MCZ), 1♂. **Uruguay:** *Artigas:* Arroyo Catalan Chico, Mar. 1972 (D. Robayna, CAS), 1♀. *Colonia:* Punta Gorda, Feb. 25, 1968 (R. M. Capocasale, L. Bruno, CAS), 1♀. **Argentina:** *Misiones:* Eldorado, Sept. 1–Nov. 15, 1964 (A. Kovacs, AMNH), 2♂. *Salta:* Salta (AMNH), 1♀.

DISTRIBUTION: Florida, at least the Greater Antilles (Cuba to the Virgin Islands), and most of tropical South America, from eastern Colombia to eastern Brazil, south to Peru and northern Argentina.

SYNONYMY: The baroque nomenclatural history of this species is well illustrated by its treatment in Petrunkevitch's (1926) and Bryant's (1940) surveys of the spiders of the Virgin Islands and Cuba, respectively, where males and females were assigned to different genera as well as species. This is the only species of *Teminius* known to occur in Cuba (as well as Florida, Jamaica, Puerto Rico, and the Virgin Islands), and all the relevant names referring to Cuban populations are therefore synonymized here, even though their type specimens are generally unavailable; the same is true for the Brazilian and Paraguayan names newly synonymized. The African type locality of *Syrisca vittata* is presumed to be in error, as no modern specimens of *Teminius* are known from Africa.

Teminius affinis Banks

Figures 5–8

Teminius affinis Banks, 1897: 193 (female holotype from Brazos County, Texas, in MCZ, examined).

Syrisca affinis: Petrunkevitch, 1911: 513.–Gertsch, 1935: 11, figs. 31–33.

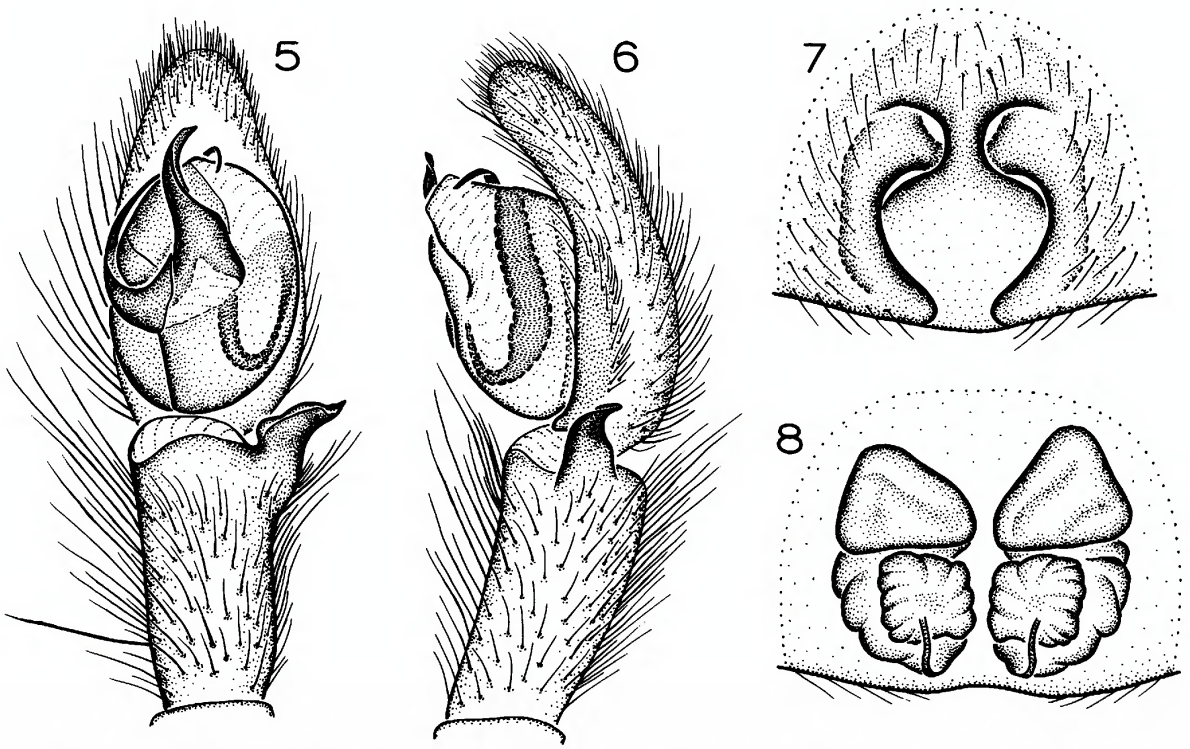
Syrisca nebulosa Gertsch and Davis, 1940: 8, fig. 8 (male holotype from 76 mi N Monterrey, Nuevo León, Mexico, in AMNH, examined). NEW SYNONYMY.

DIAGNOSIS: Males can be recognized by the shape of the retrolateral tibial apophysis, which is well separated from the distal tip of the tibia and bears a distinct terminal point (figs. 5, 6), females by the roughly triangular spermathecae (fig. 8).

MALE: Described by Gertsch and Davis (1940).

FEMALE: Described by Banks (1897).

MATERIAL EXAMINED: UNITED STATES: **Louisiana:** *Vermillion Par.:* Cheniere au Tigre, Apr. 27, 1974 (AMNH), 2♀. **Oklahoma:** "Vet Village Field," July 4, 1956 (B. Branson,



Figs. 5–8. *Teminius affinis* Banks. **5.** Left male palp, ventral view. **6.** Left male palp, retrolateral view. **7.** Epigynum, ventral view. **8.** Epigynum, dorsal view.

AMNH), 1♀. **Texas:** *Bexar Co.:* Helotes (AMNH), 1♀, May 8, 1925 (A. H. Wright, AMNH), 1♂; Somerset, Mar. 17, 1937 (A. J. Kirn, AMNH), 1♂. *Brazos Co.:* no specific locality (N. Banks, MCZ), 1♀ (holotype). *Cameron Co.:* Brownsville (AMNH), 1♀, Mar. 16, 1923 (AMNH), 1♂, 1♀; Laguna Madre, 25 mi SE Harlingen, May 1, 1945 (D. E. Hardy, AMNH), 1♀; Palm Grove, Brownsville, May 30, 1939 (S. Mulaik, AMNH), 1♀; 1.25 mi NW Port Brownsville, May 1, 1964 (H. W. Campbell, P. R. Craig, CDU), 1♂. *Dallas Co.:* woods at California Crossing, Dallas, May 26, 1940, in log (H. Knutsen, MCZ), 1♂. *Hays Co.:* no specific locality, Apr. 15, 1939 (S. and D. Mulaik, AMNH), 1♂. *Hidalgo Co.:* Bentsen-Rio Grande State Park, W Mission, June 16–29, 1962–1963 (J. A. Beatty, JAB), 1♂, 1♀; Edinburg (S. Mulaik, AMNH), 2♂, 1♀, May 2, 1935 (S. Mulaik, AMNH), 1♂, 1♀, Sept. 24, 1938 (D. Mulaik, AMNH), 1♀, June 4, 1941 (S. and D. Mulaik, AMNH), 1♀; 3 mi E Edinburg, Apr. 12, 1937 (S. Mulaik, AMNH), 1♀; La Joya, Oct. 30, 1938 (L. I. Davis, AMNH), 1♀; 5 mi S San Juan, Feb. 22, 1935 (S. Mulaik, AMNH), 1♂; SW portion of county, July 2, 1934 (S. Mulaik, AMNH), 1♀. *Kerr Co.:* Kerrville, Aug. 1939 (S. and D. Mulaik, AMNH), 1♀; 19 mi S Kerrville, May 13, 1939 (S. Mulaik, AMNH), 1♀; Raven Ranch, Aug. 1939 (D. Mulaik, AMNH), 1♂, Dec. 1939 (S. and D. Mulaik, AMNH), 4♀, June 1941 (S. and D. Mulaik, AMNH), 1♂, 2♀. *Limestone Co.:* Fort Parker State Park, SW Mexia, June 13, 1963 (J. A. Beatty, JAB), 1♂. *McLennan Co.:* Camp Tonkawa, Crawford, Apr. 18, 1943 (O. Sanders, AMNH), 3♂, 1♀. *San Patricio Co.:* 8 mi NE Sinton, Apr. 28–July 12, 1960 (H. E. Laughlin, AMNH), 7♂, 3♀. *Travis Co.:* Austin (AMNH), 4♂, 2♀, 1909 (R. V. Chamberlin, MCZ), 3♀, Sept. 1909 (AMNH), 1♀. MEXICO: **Hidalgo:** Jacala, June–July 1939, elev. 4500 ft (H. Hoogstrall, MCZ), 1♂. **Nuevo León:** Monterrey, Nov. 27, 1937 (A. M. and L. I. Davis, AMNH), 1♀; 76 mi N Monterrey, July 7, 1936 (L. I. Davis, AMNH), 1♂ (holotype). **San Luis Potosí:** vicinity of Cueva de los Sabinos, near

Valles, Mar. 8–Apr. 4, 1946 (B. J. Dontzin, E. Ruda, AMNH), 1♂, 1♀; El Valle, Apr. 1, 1946 (B. J. Dontzin, E. Ruda, AMNH), 1♀; Hotel Covadonga, Valles, 1961 (L. Steude, AMNH), 2♂, 2♀; Pujal, Mar. 25, 1940 (W. Bridges, AMNH), 1♀; 6 mi N Tancanhuit, Dec. 30, 1947, jungle, creek bottom (AMNH), 1♀; Valles, July 19, 1956 (W. J. Gertsch, V. Roth, AMNH), 1♀, July 1959 (L. Steude, AMNH), 1♂. **Tamaulipas:** La Cueva del Nacimiento del Río Frío, Feb. 16, 1970 (AMNH), 1♀; Mesa Llera, summit, Aug. 14, 1964 (W. and J. Ivie, AMNH), 1♀; Victoria, May 17, 1952 (W. J. Gertsch, M. Cazier, R. Schrammel, AMNH), 1♂.

DISTRIBUTION: Oklahoma south to northeastern Mexico. A single male (in AMNH) was reportedly collected in Phoenix, Arizona, on April 6, 1938; the specimen may simply have been transported by humans (or mislabeled). Juveniles that might belong to this species have been collected in Sonora, Mexico, and the range could conceivably extend that far west, but the Texas records are all from the eastern half of the state.

SYNONYMY: Gertsch and Davis (1940) noted no genitalic differences between the holotype of *Syrisca nebulosa* and specimens of *T. affinis*, indicating instead that "*Syrisca nebulosa* is a much smaller species than *affinis* Banks, the comparable measurements being 4.50 mm. in the former and 10.00 mm. or more in the latter." This pronounced size variation, and the apparently correlated differences in eye pattern noted by Gertsch and Davis, are found in both sexes throughout the range of the species; relatively small and large individuals have been collected together.

Teminius hirsutus (Petrunkevitch), new combination
Figures 9–12

Syrisca hirsuta Petrunkevitch, 1925: 151, figs. 74–76 (male syntype from Cerro Iglesia, Chiriquí, Panama, and female syntype from Panama City, Panamá, Panama, in PMY, examined).

Syrisca pulchra Petrunkevitch, 1925: 148, figs. 70–73 (female holotype from Remedios, Chiriquí, Panama, in PMY, examined). NEW SYNONYMY.

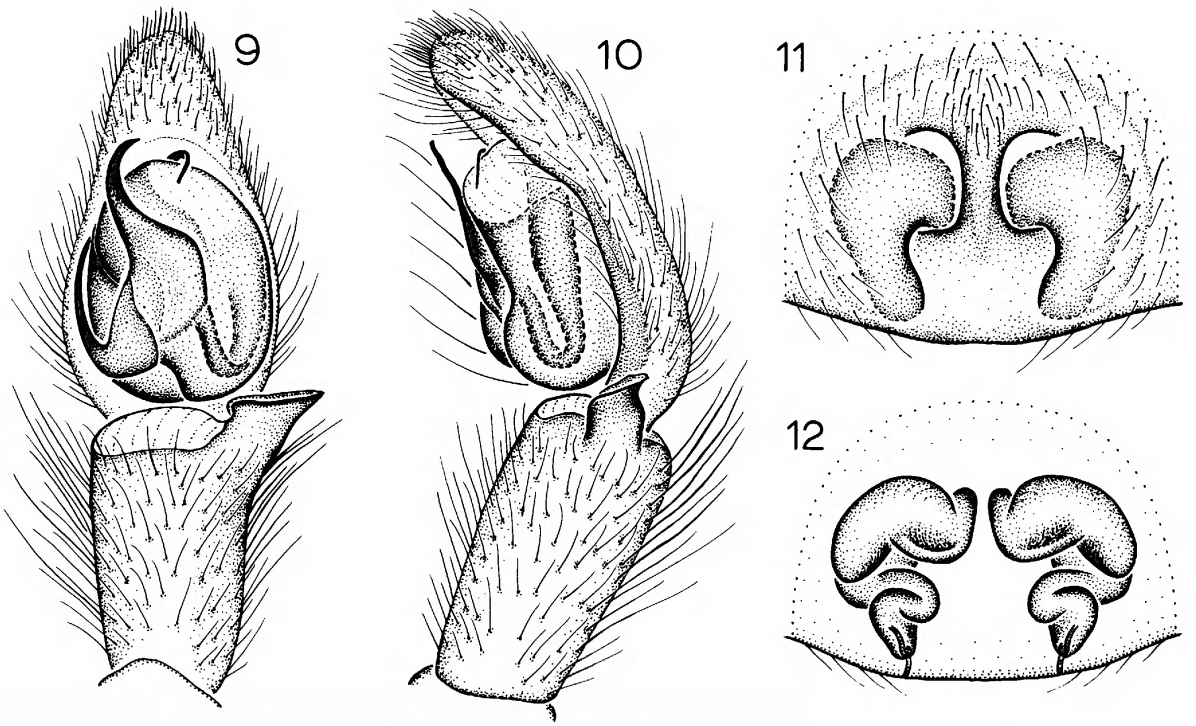
Teminius pulcher: Roewer, 1955: 408.

DIAGNOSIS: Males can be recognized by the relatively long embolus (fig. 9), females by the medially arched spermathecae (fig. 12).

MALE: Described by Petrunkevitch (1925).

FEMALE: Described by Petrunkevitch (1925).

MATERIAL EXAMINED: **Mexico:** *Campeche:* San José, Dec. 1946 (H. Wagner, AMNH), 1♂. *Chiapas:* Tuxtla Gutiérrez, July 20, 1947 (C. and M. Goodnight, AMNH), 1♀. *Oaxaca:* Juan García, Sept. 1, 1964 (J. and W. Ivie, AMNH), 1♀; summit SE Nejapa, Aug. 29, 1966 (J. and W. Ivie, AMNH), 2♀; 2 mi SE Niltepec, Aug. 16, 1966 (J. and W. Ivie, AMNH), 2♂, 1♀; 0.25 mi W Ostuta (J. Reddell, J. Fish, AMNH), 1♂; San Jerónimo, July 1909 (A. Petrunkevitch, AMNH), 1♀; Oaxaca, July 19, 1947 (B. Malkin, AMNH), 1♂; Tehuantepec, Jan. 8, 1948 (T. MacDougall, AMNH), 1♀; 2 mi NE Tehuantepec, Aug. 31, 1964 (J. and W. Ivie, AMNH), 1♂, 1♀. *Veracruz:* Veracruz (AMNH), 1♀. *Yucatán:* Hoctún, Aug. 12, 1973 (J. Reddell, AMNH), 1♂; Tres Linteles, Chichén Itzá, July 6, 1948 (C. Goodnight, AMNH), 2♀. **Honduras:** *Atlántida:* La Fragua, July 16, 1929 (A. M. Chickering, MCZ), 1♂, 1♀; Lancetilla, July 10, 1929 (A. M. Chickering, MCZ), 1♀. *Francisco Marazán:* El Zamorano, Nov. 1946 (T. D. A. Cockerell, AMNH), 1♂. **El Salvador:** *San Salvador:* San Salvador, Apr. 11, 1952, elev. 700 m (Zilch, AMNH), 1♀. **Costa Rica:** *Guanacaste:* La Irma restaurant, July 10, 1970 (W. Reeder, S. Riechert, AMNH), 1♀; Liberia, Mar. 2–4, 1984, hotel room (A. M. Young, J. Jass, S. Borkin, MPM), 1♀; Parque Nacional Santa Rosa, Apr. 5–9, 1983, elev. 250 m, under rock, deciduous forest (D. Ubick, CDU), 2♀. *San José:* Parque Nacional Braulio Carrillo, Apr. 28–30, 1983, elev. 1100 m, cloud-rainforest transect (D. Ubick, CDU), 1♀. **Panama:** *Canal Area:* Balboa, May 14, 1964 (A. M. Chickering, MCZ), 1♂; Barro Colorado Island, July 4, 1954 (A. M. Chickering, MCZ), 1♂; Fort Gulick, Feb.–May 28, 1979–1980, at lights (H. J. Harlan, AMNH), 1♂, 2♀; Gamboa, Jan. 18, 1958 (A. M. Chickering, MCZ), 1♀; Gatun, Feb. 10–Mar. 6, 1958 (A. M. Chickering, MCZ), 1♂, 1♀; Pedro Miguel, May. 7, 1958 (A. M. Chickering, MCZ), 1♂, 1♀; Summit Gardens, Dec. 20, 1957 (A. M. Chickering, MCZ), 1♀. *Chiriquí:* Cerro Iglesia, Remedios, open savanna (PMY), 1♂ (syntype); Remedios, Mar. 24, 1924, on



Figs. 9–12. *Teminius hirsutus* (Petrunkevitch). **9.** Left male palp, ventral view. **10.** Left male palp, retrolateral view. **11.** Epigynum, ventral view. **12.** Epigynum, dorsal view.

ground, open roadside (PMY), 1♀ (type). *Colón:* Santa Rosa, June–Nov., 1945 (C. D. Michener, AMNH), 22♂, 47♀. *Panamá:* Old Panama City, June 1945 (C. D. Michener, AMNH), 1♀; Panama City, under wood near beach (PMY), 1♀ (syntype). **Colombia:** *Magdalena:* Pueblo Bello, Sierra Nevada de Santa Marta, June 15, 1968, elev. 1200 m, beating vegetation (B. Malkin, AMNH), 1♀; Valledupar, May 22–24, 1968 (B. Malkin, AMNH), 1♀. *Valle de Cauca:* Calí, Jan. 1964 (P. B. Schneble, MCZ), 1♂, Mar. 2, 1973, elev. 1000 m, under stones (H. W. Levi, MCZ), 1♀; Palmira, May–Aug, 1964, pitfall, cotton (R. Hunter, CAS), 4♂, 3♀. **Venezuela:** *Portuguesa:* Guanare, Sept. 10–17, 1957 (B. Malkin, AMNH), 1♂. **Netherlands Antilles:** *Curaçao:* Piscadera Baai, Dec. 18, 1962, cactus (H. W. Levi, MCZ), 3♀; St. Martha Baai, Sint-Nicolaas, Dec. 29, 1962 (B. de Jong, H. W. Levi, MCZ), 1♂, 1♀. **Hispaniola:** *Haiti:* Port-au-Prince, Aug. 8–11, 1969 (L. Raynolds, MCZ), 1♀.

DISTRIBUTION: Central Mexico south to Colombia, Venezuela, and Curaçao, with a single record (probably an introduction) from Hispaniola.

SYNONYMY: Petrunkevitch (1925: 154) indicated that the epigynum of *S. hirsuta* is "much like that of *S. pulchra*"; the two female types differ significantly only in size. This is the only species found among the available specimens from Panama. As first revisers, we choose the former name because it was based on both sexes.

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